

WHAT IS CLAIMED IS:

1. A device for actuating a plurality of electric motors in a transportation device, said device comprising:

a plurality of output stages and

a control circuit for actuating said output stages, wherein the output stages are connected to a plurality of electric motors, wherein said plurality of output stages are each additionally connected to one further electric motor by the control circuit, and wherein the control circuit actuates each output stage whereby said each output stage actuates one of the plurality of electric motors and the further electric motor, with the output stages being interconnected to one another and to the electric motors in a matrix configuration so that a plurality of row lines and a plurality of column lines at whose points of intersection the plurality of electric motors are arranged, and wherein using each of said plurality of row lines and each of said plurality of column lines, in each case, two of said output stages are connected to power breakers which connect, in accordance with signals of the control circuit, to one of a first and a second potential (earth, U_{batt}) so that an actuated one of said plurality of electric motors and said further electric motor can be operated either in one direction or the other.

2. A device for actuating a plurality of electric motors in a transportation device, said device comprising:

a plurality of output stages and a control circuit for actuating said output stages whereby the output stages are each connected to a plurality of electric motors each arranged between two power supply lines and wherein one power supply connection of said plurality of electric motors is connected to a common power supply line, and another power supply connection of the electric motor is connected to other power supply lines, whereby each of said power supply lines is connected to two of said plurality of output stages, the first of said output stages connecting to a first potential, and the second of said output stages connecting to a second potential, and

a circuit breaker provided between each of said plurality of electric motors and a respective assigned one of said two power supply lines in order to prevent parallel currents as a result of ones of said plurality of electric motors which are not actuated.

3. The device according to Claim 1, wherein a circuit breaker permits one of said electric motors to be supplied with power by an assigned one of said power supply lines if the voltage drop across the said one electric motor which is caused by the difference in potential

between two of said power supply lines of the electric motor is greater than a threshold voltage.

4. The device according to Claim 2, wherein the power breaker switches off the flow of current in both directions of the power supply lines.

5. The device according to Claim 1, wherein the control circuit actuates ones of the output stages assigned to a particular one of said power supply lines in such a way that one power breaker is connected to low battery potential and a further power breaker is connected to high battery potential.

6. The device according to Claim 1, wherein the output stages are provided with an actuating interface, and the output stages are each embodied as a standardized module so that each module can be used at a different position in the matrix-like structure.

7. The device according to Claim 1, wherein, in specific ones of said output stages, a current measuring circuit is provided, and wherein the control circuit initiates an error routine when there is excess current.

8. The device according to Claim 1, wherein, when one of said output stages fails, an error routine provides switching over to another one of said output stages of the matrix, with the said one electric motor being actuated by another one output stage.

9. A device for actuating a plurality of electric motors, comprising:
a plurality of output stages connected to a plurality of electric motors arranged in a matrix configuration;
power breakers connected to two of said plurality of output stages; and
a control circuit for controlling said power breakers to provide connection to one of a first potential and a second potential so that an actuated one of said plurality of electric motors can be operated either in one direction or a reverse direction.

10. The device according to Claim 9, wherein a circuit breaker permits one of said electric motors to be supplied with power by an assigned one of said power supply lines if the voltage drop across the said one electric motor which is caused by the difference in potential between two of said power supply lines of the electric motor is greater than a threshold voltage.

11. The device according to Claim 9, wherein the power breaker switches off the flow of current in both directions of the power supply lines.

12. The device according to Claim 9, wherein the control circuit actuates ones of the output stages assigned to a particular one of said power supply lines in such a way that one power breaker is connected to low battery potential and a further power breaker is connected to high battery potential.